AMENDMENTS TO THE CLAIMS

Please amend claims 1, 8, and 14, such that the status of the claims is as follows:

1. (Currently Amended) A method for three-dimensional modeling comprising the steps of heating a build chamber to an elevated temperature, dispensing modeling material from an outlet of a dispensing head onto a base provided in the build chamber, and moving the dispensing head and the base in three-dimensions with respect to one another in synchrony with the dispensing of modeling material so as to build up a three-dimensional object of predetermined shape on the base, characterized by:

maintaining physical and thermal separation between the heated build chamber and a gantry that controls motion of the dispensing head with at least a first deformable thermal insulator and a second deformable thermal insulator; [[.]]

compressing or expanding the first deformable thermal insulator when the dispensing head is moved in a first direction;

compressing or expanding the second deformable thermal insulator when the dispensing head is moved in a second direction that is orthogonal to the first direction;

2. (Original) The method of claim 1, wherein the gantry further controls motion of the base.

3. (Original) The method of claim 1, and further characterized by:

maintaining physical and thermal separation between the heated build chamber and a lift that controls motion of the base.

4. (Original) The method of claim 1, wherein the build chamber is heated to a temperature greater than 200°C.

5. (Original) The method of claim 1, wherein the dispensing head is moved in an x-y plane and the base is moved along a z-axis.

6. (Original) The method of claim 1, and further characterized by:

providing a feedstock of modeling material to an inlet of the dispensing head located external to the build chamber.

7. (Original) The method of claim 1, wherein the build chamber is heated by convection such that an air flow pattern is created in the build chamber, and further characterized by:

deflecting air in the flow pattern towards the dispensing head outlet.

8. (Currently amended) A method for three-dimensional modeling comprising the steps of:

heating a build chamber to an elevated temperature;

dispensing modeling material from an outlet of a dispensing head onto a base provided in the build chamber;

moving the dispensing head and the base in three-dimensions with respect to one another in synchrony with the dispensing of modeling material so as to build up a three-dimensional object of predetermined shape on the base;

controlling the motion of the dispensing head and the base with motion control components located external to the build chamber, the motion control components comprising at least one rail that defines an axis of movement for the dispensing head; [[and]]

maintaining thermal isolation between the external motion control components and the build chamber with at least a first deformable thermal insulator and a second deformable thermal insulator; [[.]]

compressing or expanding the first deformable thermal insulator when the dispensing head is moved in a first direction; and

compressing or expanding the second deformable thermal insulator when the dispensing head is moved in a second direction that is orthogonal to the first direction.

9. (Original) The method of claim 8, wherein the build chamber is heated to a temperature greater than 150°C.

10. (Original) The method of claim 8, wherein the build chamber is heated to a temperature greater than 200°C.

11. (Original) The method of claim 8, wherein the dispensing head is moved in an x-y plane and the base is moved along a z-axis.

12. (Original) The apparatus of claim 8, and further comprising the step of:

providing a feedstock of modeling material to an inlet of the dispensing head located external to the build chamber.

13. (Original) The method of claim 8, wherein the build chamber is heated by convection such that an air flow pattern is created in the build chamber, and further characterized by:

deflecting air in the flow pattern towards the dispensing head outlet.

14. (Currently amended) A method for three-dimensional modeling comprising the steps of:

heating a build chamber to an elevated temperature;

dispensing modeling material from an outlet of a dispensing head onto a base provided in the build chamber; and

moving the dispensing head and the base in three-dimensions with respect to one another in synchrony with the dispensing of modeling material so as to build up a three-dimensional object of predetermined shape on the base;

wherein the motion of the dispensing head and the base are controlled by motion control components, the motion control components being located external to and in thermal isolation from the build chamber by at least ~~one~~ a first deformable thermal insulator and a second deformable thermal insulator, wherein the first deformable thermal

insulator is compressed or expanded when the dispensing head is moved in a first direction, and wherein the second deformable thermal insulator is compressed or expanded when the dispensing head is moved in a second direction that is orthogonal to the first direction.

15. (Original) The method of claim 14, wherein the build chamber is heated to a temperature greater than 150°C.

16. (Original) The method of claim 14, wherein the build chamber is heated to a temperature greater than 200°C.

17. (Original) The method of claim 14, wherein the dispensing head is moved in an x-y plane and the base is moved along a z-axis.

18. (Original) The method of claim 14, and further comprising the step of:
providing a feedstock of modeling material to an inlet of the dispensing head located external to the build chamber.

19. (Original) The method of claim 14, and further comprising the step of:
removing a build-up of modeling material from the dispensing head outlet by driving the dispensing head outlet against a rotating member of a cleaning assembly.

20. (Previously Presented) The method of claim 14, wherein the at least one deformable thermal insulator comprises at least one set of baffles.